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REMARKS/ARGUMENTS

Claims 1-33 are pending in the present application. The Examiner has rejected claims 1-8 and 10-33. The Examiner has objected to claim 9, which Applicant has rewritten as new claim 34. Applicant has amended claims 1, 15, 23, and 29. Applicant respectfully requests reconsideration of pending claims 1-34.

The Examiner has rejected claims 1-8, 10, 11, 13-17, 19-27, 29-31, and 33 under 35 U.S.C. 102(e) as being anticipated by Bertin et al. (U.S. Patent No. 5,687,167). Regarding claims 1 and 23, the Examiner states that "Bertin discloses a link characteristic processor (Fig. 3) comprising a processing module 305 and memory 306 operably coupled to the processing module. The memory includes operating instruction that cause the processing module to determine connection type characteristics for a link, and advertise the connection type characteristics to at least one node in the network (col. 6, lines 5-14)." The Examiner further states that "[t]he node utilizes the connection type characteristics for selecting a routing path within the network for a connection (col. 6, lines 23-26)."

Applicant has amended claims 1, 15, 23, and 29. The other rejected claims depend from claims 1, 15, 23, and 29. Thus, Applicant submits that claims 1-8, 10, 11, 13-17, 19-27, 29-31, and 33 are in condition for allowance.

Regarding claim 2, the Examiner states that "Bertin discloses a routing path within the network for a connection based on the connection type characteristics (col. 6, lines 30-33)." Applicant has amended claim 1. Claim 2 depends from claim 1. Thus, Applicant submits that claim 2 is in condition for allowance.

Regarding claims 3 and 24, the Examiner states that "Bertin discloses detecting a change in the link, wherein the change produces altered connection type characteristics, and advertising the altered connection type characteristics (col. 8, lines 43-54)." Applicant has amended claims 1 and 23. Claims 3 and 24 depend from claims 1 and 23, respectively. Thus, Applicant submits that claims 3 and 24 are in condition for allowance.

Regarding claims 4 and 25, the Examiner states that "Bertin discloses the connection type characteristics is performed by a localized node coupled to the link (col. 5, lines 5-7)." Applicant has amended claims 1 and 23. Claims 4 and 25 depend from claims 1 and 23, respectively. Thus, Applicant submits that claims 4 and 25 are in condition for allowance.

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Regarding claims 5, 6, 26, and 27, the Examiner states that "Bertin discloses broadcasting the connection type characteristics to each nodes in the network (col. 13, lines 13-17)." Applicant has amended claims 1 and 23. Claims 5, 6, 26, and 27 depend from either claim 1 or claim 23. Thus, Applicant submits that claims 5, 6, 26, 27 are in condition for allowance.

Regarding claim 7, the Examiner states that "Bertin discloses compiling connection type characteristics for a plurality of links within the network to produce a characteristic data set, wherein selecting the routing path further comprises selecting the routing path using the characteristic data set (Fig. 5, col. 8, lines 56-67)." Applicant has amended claims 1 and 23. Claims 3 and 24 depend from claims 1 and 23, respectively. Thus, Applicant submits that claims 3 and 24 are in condition for allowance.

Regarding claim 8, the Examiner states that "Bertin discloses comparing characteristics of a connection request with the characteristic data set, wherein the routing path is provided in response to the connection request (col. 10, lines 37-47)." Applicant has amended claim 1. Claim 8 depends from claim 1. Thus, Applicant submits that claim 8 is in condition for allowance.

Regarding claim 10, the Examiner states that "Bertin discloses the connection type characteristics include information indicating likelihood of establishing the connection using the link, wherein the connection has a connection type (col. 9, lines 2-7)." Applicant has amended claim 1. Claim 10 depends from claim 1. Thus, Applicant submits that claim 10 is in condition for allowance.

Regarding claims 11, 20, and 21, the Examiner states that "Bertin discloses the connection type of the connection of one of a plurality of connection types, wherein the plurality of connection types includes a plurality of priority levels that determine prioritization of connections (col. 13, lines 64-67)." Applicant has amended claims 1 and 15. Claims 11, 20, and 21 depend from either claim 1 or claim 15. Thus, Applicant submits that claims 11, 20, and 21 are in condition for allowance.

Regarding claims 13 and 19, the Examiner states that "Bertin discloses the connection type of the connection is one of a plurality of connection types, wherein the plurality of connection types includes a plurality of user connection types, wherein bandwidth on the link is partitioned between different user connection types (Fig. 4, col. 20-29)." Applicant has amended claims 1 and 15. Claims 13 and 19 depend from claims 1 and 15, respectively. Thus, Applicant submits that claims 13 and 19 are in condition for allowance.

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Regarding claim 14, the Examiner states that "Bertin discloses sending a call setup sequence to establish the connection along with the routing path (col. 12, lines 64-67)." Applicant has amended claim 1. Claim 14 depends from claim 1. Thus, Applicant submits that claim 14 is in condition for allowance.

Regarding claims 15 and 29, the Examiner states that "Bertin discloses a connection processor (Fig. 3) comprising a processing module 305 and memory 306 operably coupled to the processing module." The Examiner further states that "[t]he memory includes operating instruction that cause the processing module to receive a connection request that includes a plurality of parameters, wherein the plurality of parameters includes a receiving party and a connection type characteristic (Fig. 1, col. 12, lines 64-67)." The Examiner continues to state that "[t]he processor then compare the plurality of parameters with a table that stores network parameters to produce a first routing path to the receiving party (Fig. 1, col. 13, lines 1-3)." The Examiner further states that "[t]he network parameters include links within the network and corresponding connection type characteristic capabilities for the links to establish the connection along the first routing path (col. 12, lines 9-25)." Applicant has amended claims 15 and 29. Applicant submits that claims 15 and 29 are in condition for allowance.

Regarding claims 16, 17, 30, and 31, the Examiner states that "Bertin discloses if establishing the connection along the first routing path is unsuccessful, compare the plurality of parameters with the table that stores network parameters to produce at least a second routing path to the receiving party, and establishing the connection along the second routing path (col. 15, lines 1-5)." Applicant has amended claims 15 and 29. Claims 16, 17, 30, and 31 depend from either claim 15 or claim 29. Thus, Applicant submits that claims 16, 17, 30, and 31 are in condition for allowance.

Regarding claims 22 and 33, the Examiner states that "Bertin discloses establishing the connection along the first routing path comprises sending a designated transit list to each node along the first routing path (col. 13, lines 12-17)." Applicant has amended claims 15 and 29. Claims 22 and 33 depend from claims 15 and 29, respectively. Thus, Applicant submits that claims 22 and 33 are in condition for allowance.

The Examiner has rejected claims 12, 18, 28, and 32 under 35 U.S.C. 103(a) as being unpatentable over Bertin et al. (U.S. Patent No. 5,687,167) in view of Chase et al. (U.S. Patent No. 6,188,671 B1). Regarding claims 12, 18, 28, and 32, the Examiner states that "Bertin discloses all of the limitation with respect claim 1, includes the connection type characteristic indicating the bandwidth

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allocation over each the link in the network (Fig. 4, col. 17-29)." The Examiner further states that "Bertin fails to teach for a plurality of connection types with switched virtual connections and soft permanent virtual connections." The Examiner continues to state that "[h]owever, Chase discloses a traffic management in a frame relay or ATM network, wherein plurality of nodes established communications using SVCs and PVCs (col. 3, lines 1-14)." The Examiner concludes that "it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include communication links of SVCs and PVCs as taught by Chase in Bertin's system with the motivation to accommodate different types of protocol network, such as X.25 and ATM."

Applicant respectfully disagrees. Applicant submits that neither Bertin et al. nor Chase et al., either alone or in combination, render obvious the claimed invention as set forth in claims 12, 18, 28, and 32. As the Examiner notes, Bertin et al. fail to teach a plurality of connection types with switched virtual connections and soft permanent virtual connections. Applicant submits that SVCs and PVCs are merely mentioned in the cited portion of Chase et al., but do not appear in any context that would suggest modification of Bertin et al. in an attempt to yield the claimed invention as set forth in claims 12, 18, 28, and 32. Likewise, does not provide any suggestion to modify its teachings in an attempt to yield the claimed invention as set forth in claims 12, 18, 28, and 32. Thus, there is no suggestion in the prior art to combine or modify the cited references in an attempt to yield the claimed invention as set forth in claims 12, 18, 28, and 32. Thus, Applicant submits that claims 12, 18, 28, and 32 are in condition for allowance.

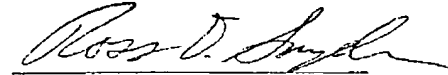
Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

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In conclusion, Applicant has overcome all of the Office's rejections, and early notice of allowance to this effect is earnestly solicited. If, for any reason, the Office is unable to allow the Application on the next Office Action, and believes a telephone interview would be helpful, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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Attorney Docket No. 1400.9801200

Version with Markings to Show Changes Made

1. (Amended) A method for communicating link connection type characteristics in a network, comprising:

determining connection type characteristics for a link within the network, wherein the connection type characteristics comprise partitioning of available bandwidth of the link between switched virtual connections and soft permanent virtual connections;

advertising the connection type characteristics to at least one node in the network;
and

utilizing, by the at least one node, the connection type characteristics for performing a network function.

15. (Amended) A method establishing a connection in a communications network, comprising:

receiving a connection request that includes a plurality of parameters, wherein the plurality of parameters includes a receiving party, and a connection type characteristic;

comparing the plurality of parameters with a table that stores network parameters to produce a first routing path to the receiving party, wherein the network parameters include links within the network and corresponding connection type characteristic capabilities for the links, wherein the connection type characteristic capabilities comprise partitioning of available bandwidth of the links between switched virtual connections and soft permanent virtual connections; and

establishing the connection along the first routing path.

23. (Amended) A link characteristic processor comprises:

a processing module; and

memory operably coupled to the processing module, wherein the memory includes operating instruction that cause the processing module to:

determine connection type characteristics for a link within the network, wherein the connection type characteristics comprise partitioning of available bandwidth of the link between switched virtual connections and soft permanent virtual connections;

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advertise the connection type characteristics to at least one node in the network, wherein the node utilizes the connection type characteristics for selecting a routing path within the network for a connection.

29. (Amended) A connection processor comprises:

a processing module; and

memory operably coupled to the processing module, wherein the memory includes operating instruction that cause the processing module to:

receive a connection request that includes a plurality of parameters, wherein the plurality of parameters includes a receiving party and a connection type characteristic;

compare the plurality of parameters with a table that stores network parameters to produce a first routing path to the receiving party, wherein the network parameters include links within the network and corresponding connection type characteristic capabilities for the links, wherein the connection type characteristic capabilities comprise partitioning of available bandwidth of the links between switched virtual connections and soft permanent virtual connections; and

establish the connection along the first routing path.

Please add claim 34 as follows:

34. A method for communicating link connection type characteristics in a network, comprising:

determining connection type characteristics for a link within the network;

advertising the connection type characteristics to at least one node in the network;

utilizing, by the at least one node, the connection type characteristics for performing a network function, wherein utilizing further comprises selecting, by the at least one node, a routing path within the network for a connection based on the connection type characteristics;

detecting a change in the link, wherein the change produces altered connection type characteristics;

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advertising the altered connection type characteristics; and
compiling connection type characteristics for a plurality of links within the
network to produce a characteristic data set, wherein selecting the routing path further
comprises selecting the routing path using the characteristic data set, wherein selecting
the routing path further comprises comparing characteristics of a connection request with
the characteristic data set, wherein the routing path is provided in response to the
connection request, wherein compiling further comprises compiling the connection type
characteristics for the plurality of links with additional network characteristics to produce
the characteristic data set.